

GenCore version 4.5
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OM nucleic - nucleic search, using sw model

Run on: August 27, 2001, 13:46:47 ; Search time 177.11 Seconds
(without alignments)
9781.382 Million cell updates/sec

Title: US-09-784-340-1

Perfect score: 2759
Sequence: 1 caaccattgcagatcagtggt.....ctgtcagccgttaccgtacg 2759

Scoring table:
OLIGO_NUC
Gapop 60.0 , Gapext 60.0

Searched: 730101 seqs, 313950809 residues

Word size : 0

Total number of hits satisfying chosen parameters: 1460202

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database :

N.Geneseq_0601:*

- 1: /SIDSI/gcgdata/geneseq/geneseqn/NA1980.DAT:*
- 2: /SIDSI/gcgdata/geneseq/geneseqn/NA1981.DAT:*
- 3: /SIDSI/gcgdata/geneseq/geneseqn/NA1982.DAT:*
- 4: /SIDSI/gcgdata/geneseq/geneseqn/NA1983.DAT:*
- 5: /SIDSI/gcgdata/geneseq/geneseqn/NA1984.DAT:*
- 6: /SIDSI/gcgdata/geneseq/geneseqn/NA1985.DAT:*
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- 8: /SIDSI/gcgdata/geneseq/geneseqn/NA1987.DAT:*
- 9: /SIDSI/gcgdata/geneseq/geneseqn/NA1988.DAT:*
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- 11: /SIDSI/gcgdata/geneseq/geneseqn/NA1990.DAT:*
- 12: /SIDSI/gcgdata/geneseq/geneseqn/NA1991.DAT:*
- 13: /SIDSI/gcgdata/geneseq/geneseqn/NA1992.DAT:*
- 14: /SIDSI/gcgdata/geneseq/geneseqn/NA1993.DAT:*
- 15: /SIDSI/gcgdata/geneseq/geneseqn/NA1994.DAT:*
- 16: /SIDSI/gcgdata/geneseq/geneseqn/NA1995.DAT:*
- 17: /SIDSI/gcgdata/geneseq/geneseqn/NA1996.DAT:*
- 18: /SIDSI/gcgdata/geneseq/geneseqn/NA1997.DAT:*
- 19: /SIDSI/gcgdata/geneseq/geneseqn/NA1998.DAT:*
- 20: /SIDSI/gcgdata/geneseq/geneseqn/NA1999.DAT:*
- 21: /SIDSI/gcgdata/geneseq/geneseqn/NA2000.DAT:*
- 22: /SIDSI/gcgdata/geneseq/geneseqn/NA2001.DAT:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	551	20.0	1650	21	Human carboxydrate
2	484	17.5	515	20	EST clone BR77. H
3	350	12.7	350	21	Human secreted pro
4	35	1.3	978	21	Human UGT2B15 exon
5	35	1.3	1976	21	Human UDP-glucuron
6	32	1.2	2107	19	Uridine diphospho-
7	29	1.1	2092	21	Human UDP-glucuron
8	28	1.0	480	21	Human UGT2B15 exon
9	28	1.0	1362	19	Human sapiens clone
10	27	1.0	930	22	Human secreted pro
11	27	1.0	1138	21	Human UGT2B4 exon

12	27	1.0	1316	21	AA255915	Arabidopsis thalia
13	27	1.0	1380	22	AAE33111	Human secreted pro
14	27	1.0	1721	22	AAE63820	Human secreted pro
15	27	1.0	3426	22	AAE67268	Human NFAR-1 codin
16	27	1.0	3464	22	AAE91232	Human DHFR gene ex
17	26	0.9	1069	20	AAE06970	Mouse secretory pe
18	26	0.9	1069	21	AAE08294	Mouse ortholog gen
19	26	0.9	1200	21	AAE15723	Human prostate can
20	26	0.9	1375	20	AAE41371	Human normal uteru
21	26	0.9	1602	21	AAE95210	Human UGT2B15 exon
22	25	0.9	48	20	AAE11021	Probe PL-3 for HIV
23	25	0.9	61	21	AAE29871	Human secreted pro
24	25	0.9	72	20	AAE11017	Probe OL-1 for HIV
25	25	0.9	75	20	AAE11018	Probe OL-4 for HIV
26	25	0.9	175	21	AAE13071	Human secreted pro
27	25	0.9	282	20	AAE86663	EST clone BF314.
28	25	0.9	302	21	AAE98700	Human colon cancer
29	25	0.9	349	21	AAE94854	Cat flea hindgut a
30	25	0.9	396	22	AAE94934	Human ovarian can
31	25	0.9	492	21	AAE93696	Cat flea hindgut a
32	25	0.9	524	21	AAE96571	Noncoding region o
33	25	0.9	557	21	AAA06603	Human immunogeni
34	25	0.9	569	21	AAE80477	Human colon cancer
35	25	0.9	661	20	AAE84479	Human secreted pro
36	25	0.9	747	20	AAE30361	DNA encoding a hum
37	25	0.9	777	19	AAE95681	Human secreted pro
38	25	0.9	890	20	AAE37519	Human secreted pro
39	25	0.9	900	21	AAE08617	Fusarium venenatum
40	25	0.9	957	11	AAE00441	Aequorin gene. Ae
41	25	0.9	958	22	AAE92233	Aequorin-encodi
42	25	0.9	959	9	AAE81534	PAQ440 aequorin ge
43	25	0.9	1093	21	AAE77825	Human cancer assoc
44	25	0.9	1179	21	AAE47833	Arabidopsis thalia
45	25	0.9	1187	21	AAE52841	Arabidopsis thalia

ALIGNMENTS

RESULT 1

ID AAC65396 standard; cDNA; 1650 BP.

AC XX

XX AAC65396;

DT 13-FEB-2001 (first entry)

XX XX

DE Human carboxydrate-modifying enzyme cDNA Incyte ID No: 2912330CB1.

XX XX

KW Human: carboxydrate-modifying enzyme; CME; antidiabetic;

KW immunosuppressive; anti-HIV; antiinflammatory; antianemic;

KW antisthmatic; antilarteriosclerotic; antihypert; hepatotropic;

KW nephrotropic; antilgout; chytromimetic; neurop; ective; osteopathic;

KW antiarthritic; antipsoriatic; utropathic; ophthalmological;

KW dermatological; antilucer; cytostatic; virucide; antibacterial;

KW fungicide; protozoacide; tranquiliser; vulnery; diabetes;

KW autoimmune disorder; inflammatory disorder; infection; ss.

XX XX

OS Homo sapiens.

XX XX

PN WO200063351-A2.

XX XX

PD 26-OCT-2000.

XX XX

PF 20-APR-2000; 2000MO-US10882.

XX XX

PR 21-APR-1999; 990S-0130383.

XX XX

PA (INCY-) INCYTE GENOMICS INC.

XX XX

PI Lal P, Yue H, Tang YT, Hillman JL, Baughn MR, Yang J;

XX XX

DR WPI; 2000-672729/65.

DR P-PSDB; AAB28677.

XX Novel carbohydrate modifying enzyme polypeptides and polynucleotides
PT for diagnosis, treatment, and prevention of carbohydrate metabolism
PT disorders, autoimmune/inflammatory disorders, and cancer

XX Claim 4: Page 75; 75pp; English.

XX The present cDNA sequence encodes a human carbohydrate-modifying enzyme
CC (CME). CME polynucleotides and polypeptides are useful for treating and
CC diagnosing diseases associated with CME such as diabetes,
CC autoimmune/inflammatory disorders such as AIDS, Addison's disease,
CC adult respiratory distress syndrome, allergies, anaemia, asthma,
CC atherosclerosis, autoimmune thyroiditis, bronchitis, cholecystitis,
CC contact dermatitis, Crohn's disease, emphysema, erythroblastosis fetalis,
CC glomerulonephritis, Good pasture's syndrome, gout, Grave's disease,
CC Hashimoto's thyroiditis, multiple sclerosis, myasthenia gravis,
CC osteoarthritis, osteoporosis, pancreatitis, polymyositis, psoriasis,
CC Reiter's syndrome, arthritis, scleroderma, Sjogren's syndrome, systemic
CC lupus erythematosus, ulcerative colitis, uveitis, Werner syndrome,
CC complications of cancer, haemodialysis, and extracorporeal circulation,
CC viral, bacterial, fungal parasitic, protozoal, and helminthic infections,
CC trauma, or cancer. CME, or its catalytic or immunogenic fragment, is
CC useful for drug screening.

XX Sequence 1650 BP; 489 A; 330 C; 354 G; 477 T; 0 other;

XX Query Match 20.0%; Score 551; DB 21; Length 1650;

XX Best Local Similarity 100.0%; Pred. No. 2.4e-189;

XX Matches 551; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1097 tgaatccccagaatgatctcttgatcccaaaacagctttacatcattg 1156
DB 1100 tgaatccccagaatgatctcttgatcccaaaacagctttacatcattg 1159
QY 1157 ggaatgaatggagctatgaagctattacatgggggtccctatggtggagttccata 1216
DB 1160 ggaatgaatggagctatgaagctattacatgggggtccctatggtggagttccata 1219
QY 1217 ttgggagcagcttgatatacagctcatgaagcgaagagcagctgtaagaata 1276
DB 1220 ttgggagcagcttgatatacagctcatgaagcgaagagcagctgtaagaata 1279
QY 1277 aactcaaaactatgaagaagcgaagattactgaaggctttggaacagctattccgat 1336
DB 1280 aactcaaaactatgaagaagcgaagattactgaaggctttggaacagctattccgat 1339
QY 1337 tcccttataaagagaatgctatgagattacaagaattccacatgatacactgtaaaag 1396
DB 1340 tcccttataaagagaatgctatgagattacaagaattccacatgatacactgtaaaag 1399
QY 1397 cccctagatcgagagctctcttgatcgagttgtcatgcccacaagaagagcgaagcac 1456
DB 1400 cccctagatcgagagctctcttgatcgagttgtcatgcccacaagaagagcgaagcac 1459
QY 1457 ctgagatcagctgcccacatgactacactggtccagcagctactctataatgattggg 1516
DB 1460 ctgagatcagctgcccacatgactacactggtccagcagctactctataatgattggg 1519
QY 1517 ttcctgctgacctgtgtggaactgctatattctgttcacaaaatgtttttatttcc 1576
DB 1520 ttcctgctgacctgtgtggaactgctatattctgttcacaaaatgtttttatttcc 1579
QY 1577 tgtcaaaaatttaataaactgaagaatagaagaagagagatgattcttccaatca 1636
DB 1580 tgtcaaaaatttaataaactgaagaatagaagaagagagatgattcttccaatca 1639
QY 1637 agaaagacctg 1647
DB 1640 agaaagacctg 1650

RESULT 2

AAV87412
ID AAV87412 standard; cDNA; 515 BP.

XX AAV87412;

XX 27-APR-1999 (first entry)

XX EST clone BR77.

XX Expressed sequence tag; secreted protein; haematopoiesis regulator;

XX tissue growth; activin; inhibin; tumour invasion suppressor; EST: human;

XX chemotaxis; chemokinesis; haemostasis; gene therapy; thrombolysis;

XX receptor; ligand; anti-inflammatory; tumour inhibitor; ds.

XX Homo sapiens.

XX MO9845435-A2.

XX 15-OCT-1998.

XX 10-APR-1998; 98WO-US06954.

XX 10-APR-1997; 97US-0835913.

XX (GENE) GENETICS INST INC.

XX Agostino MJ, Jacobs K, Lavallie ER, McCoy JM, Merberg D;

XX Racie LA, Spaulding V, Treacy M;

XX WPI; 1999-070076/06.

XX New polynucleotides encoding human secreted proteins - derived from

XX e.g. human blood, kidney, foetal lung, placenta, testes, brain,

XX ovary, pituitary, retina and colon cDNA libraries

XX Claim 1; Page 556; 633pp; English.

XX This sequence represents an expressed sequence tag (EST), and is a
XX polynucleotide of the invention. The polynucleotides of the invention are
XX all secreted EST sequences isolated from a variety of human tissue
XX sources. The EST sequences and proteins encoded by them are predicted to
XX have useful biological activities which would make them suitable for
XX treating, preventing or ameliorating medical conditions in humans and
XX animals, although no supporting data is given. Suggested activities
XX include nutritional activity, immune stimulating or suppressing activity,
XX haematopoiesis regulating activity, tissue growth activity,
XX activin/inhibin activity, chemotactic/chemokinetic activity, haemostatic
XX and thrombolytic activity, receptor/ligand activity, anti-inflammatory
XX activity, cadherin/tumour invasion suppressor activity, tumour inhibition
XX therapy. The EST sequences are also stated to be useful for gene

XX Sequence 515 BP; 148 A; 98 C; 122 G; 147 T; 0 other;

XX Query Match 17.5%; Score 484; DB 20; Length 515;

XX Best Local Similarity 100.0%; Pred. No. 3.6e-165;

XX Matches 484; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 27 gaactgcacatgagtgatgacagtgatgatttctgctcgcagcctctc 86
DB 22 gaactgcacatgagtgatgacagtgatgatttctgctcgcagcctctc 81
QY 87 gttgtgctgtgagctctgtggaagctcgtgtgtgcccctgtacatgacatggc 146
DB 82 gttgtgctgtgagctctgtggaagctcgtgtgtgcccctgtacatgacatggc 141
QY 147 ttaatgtaagtgatcttctagaagagctcatagtgagagcctatgagtgatgga 206
DB 142 ttaatgtaagtgatcttctagaagagctcatagtgagagcctatgagtgatgga 201
QY 207 ctcaactaaagcttcgttaattgactacaggaagccttcgtcatgtaatttgagggg 266

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|||||
Db 202 ctacactcaagccttcgttaactgactacaggaagccttcgtcattgaaattgaggtg 261
|||
Qy 267 tccatattgcacagagcagagcaagaagaataattgttgcacctgacctgattg 326
|||
Db 262 tccatattgcacagagcagagcaagaagaataattgttgcacctgacctgattg 321
|||
Qy 327 tcttgcacagccttatcaacctgacacgttataaataatgattttttgttgtaa 386
|||
Db 322 tcttgcacagccttatcaacctgacacgttataaataatgattttttgttgtaa 381
|||
Qy 387 taagaggaacttaataaatgattgttgagagccttatacctacagcgttataaga 446
|||
Db 382 taagaggaacttaataaatgattgttgagagccttatacctacagcgttataaga 441
|||
Qy 447 agctacaggaacacactacgtatgattccttataagccttgatcccttgagagac 506
|||
Db 442 agctacaggaacacactacgtatgattccttataagccttgatcccttgagagac 501
|||
Qy 507 tgat 510
|||
Db 502 tgat 505
|||

RESULT 3
AAC03286
ID AAC03286 standard; cDNA: 350 BP.
XX
AC AAC03286;
XX
DT 06-OCT-2000 (first entry)
XX
DE Human secreted protein 5' EST, SEQ ID NO: 3284.
XX
KW Human; 5' EST: expressed sequence tag; secreted protein; cDNA isolation;
KW gene therapy; chromosome mapping; ss.
XX
OS Homo sapiens.
XX
PN EP1033401-A2.
XX
PD 06-SEP-2000.
XX
PF 21-FEB-2000; 2000EP-0200610.
XX
PR 26-FEB-1999; 99US-0122487.
XX
PA (GEST ) GENSET.
XX
PI Dumas Mline Edwards J, Duclert A, Giordano J;
XX
DR MPI: 2000-500381/45.
XX
DR P-PSDB; AAC03280.
XX
PT New nucleic acid that is a 5' expressed sequence tag (5' EST) for
PT obtaining cDNAs and genomic DNAs that correspond to 5'ESTs and for
PT diagnostic, forensic, gene therapy and chromosome mapping procedures -
XX
XX
PS Claim 1: SEQ ID 3284; 71pp + CD-ROM; English.
XX
XX
CC The present sequence is one of a large number of 5' ESTs derived from
CC mRNAs encoding secreted proteins. An ORF has been identified within the
CC sequence. The 5' ESTs were prepared from total human RNAs or polyA+ RNAs
CC derived from 30 different tissues. EST sequences usually correspond
CC mainly to the 3' untranslated region (UTR) of the mRNA because they are
CC often obtained from oligo-dT primed cDNA libraries. Such ESTs are not
CC well suited for isolating cDNA sequences derived from the 5' ends of
CC mRNAs and even in those cases where longer cDNA sequences have been
CC obtained, the full 5' UTR is rarely included. 5' ESTs are derived from
CC mRNAs with intact 5' ends and can therefore be used to obtain full length
CC cDNAs and genomic DNAs. 5' ESTs are also used in diagnostic, forensic,
CC gene therapy and chromosome mapping procedures. They are used to obtain
CC upstream regulatory sequences and to design expression and secretion

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CC vectors.
XX
SQ Sequence 350 BP; 108 A; 69 C; 77 G; 96 T; 0 other;

Query Match 12.7%; Score 350; DB 21; Length 350;
Best Local Similarity 100.0%; Pred. No. 5,6e-117;
Matches 350; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 791 gagatgtgctaatacgaacataattggatttgaatttcacaccataccaactaac 850
|||
Db 1 gagatgtgctaatacgaacataattggatttgaatttcacaccataccaactaac 60
|||
Qy 851 ttggaatttggttgagagattgacactgaaacctgcaaaagtcttgcttaaggaaatgaa 910
|||
Db 61 ttggaatttggttgagagattgacactgaaacctgcaaaagtcttgcttaaggaaatgaa 120
|||
Qy 911 aatttgccagaggttcagagggaagatggtatggtgttctctctggtgtaactgatt 970
|||
Db 121 aatttgccagaggttcagagggaagatggtatggtgttctctctggtgtaactgatt 180
|||
Qy 971 caaatgttacagaagaagaagcctaataatgcttcaagcccttgccagatccacag 1030
|||
Db 181 caaatgttacagaagaagaagcctaataatgcttcaagcccttgccagatccacag 240
|||
Qy 1031 aagtggttaaggaggtacaaaggaagaaacacatccactaaggagccaatactggctg 1090
|||
Db 241 aagtggttaaggaggtacaaaggaagaaacacatccactaaggagccaatactggctg 300
|||
Qy 1091 tatgattgtaaccagaaatgattcttctgtgcatcccaaaccaaac 1140
|||
Db 301 tatgattgtaaccagaaatgattcttctgtgcatcccaaaccaaac 350
|||

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RESULT 4
AA295211
ID AA295211 standard; DNA: 978 BP.
XX
AC AA295211;
XX
DT 05-JUN-2000 (first entry)
XX
DE Human UGT2B15 exon 5 nucleotide sequence.
XX
KW UDP-glucuronosyltransferase 2B15; UGT2B15; polymorphism; metabolism;
KW drug interaction; detect; human; single nucleotide polymorphism;
KW SNPs; DS.
XX
OS Homo sapiens.
XX
PN WO200006776-A1.
XX
PD 10-FEB-2000.
XX
PF 22-JUL-1999; 99WO-US16675.
XX
PR 28-JUL-1998; 98US-0094391.
XX
PA (AXYS-) AXYS PHARM INC.
XX
PI Galvin M, Miller A, Penny L, Riedy M;
XX
DR MPI: 2000-195321/17.
XX
PT Novel human UDP-glucuronosyltransferase sequence, polymorphisms for
PT genotyping individuals to predict rate of metabolism of substrates and
PT for identifying potential drug interactions -
XX
XX
PS Example 3; Page 62; 72pp; English.
XX
XX
CC This sequence represents the nucleotide sequence of exon 5 of the human
CC UDP-glucuronosyltransferase 2B15 (UGT2B15) gene.
CC UDP-glucuronosyltransferase (UGTs) are a family of enzymes that catalyze

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CC the glucuronic acid conjugation of a wide range of endogenous and
CC exogenous substrates. The UGT2B gene subfamily encode steroid
CC metabolizing isoforms in the liver. Alteration of the expression or
CC function of UGTs may effect drug metabolism. The invention relates to
CC non-chromosomal nucleic acid molecules, which comprise human UGT2B
CC sequence polymorphisms. Probes which detect the UGT2B locus polymorphisms
CC can be used to detect altered UGT2B metabolism of a substrate in an
CC individual. The nucleic acid molecules comprising a human UGT2B sequence
CC polymorphism can be used in screening assays for genotyping individuals,
CC also to predict their rate of metabolism of UGT2B substrate, potential
CC drug-drug interactions and adverse side effects. The polymorphisms can be
CC used as single nucleotide polymorphisms (SNPs) for detecting genetic
CC linkage related to phenotypic variation in activity or expression of
CC UGT2B protein. The polymorphism containing nucleic acid molecules may
CC also be used for generating genetically modified non-human animals and
CC for obtaining site specific gene modification in cell lines.

SO Sequence 978 BP; 321 A; 187 C; 162 G; 308 T; 0 other;
Query Match 1.3%; Score 35; DB 21; Length 978;
Best Local Similarity 100.0%; Pred. No. 0.0008;
Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1424 gagttgtcatgcgcacaaaggagccaagcact 1458
|||||
DB 408 gagttgtcatgcgcacaaaggagccaagcact 442

RESULT 5
AA95206
ID AA95206 standard; DNA; 1976 BP.

AC AA95206;
DT 05-JUN-2000 (first entry)
XX

DE Human UDP-glucuronosyltransferase 2B15 nucleotide sequence.

XX UDP-glucuronosyltransferase 2B15; UGT2B15; polymorphism; metabolism;
KW drug interaction; detect; human; single nucleotide polymorphism;
KM SNPs; ds.

OS Homo sapiens.

PN WO200006776-A1.

XX 10-FEB-2000.

PD 22-JUL-1999; 99WO-US16675.

XX 28-JUL-1998; 98US-0094391.

PR (AXYS-) AXYS PHARM INC.

PA Galvin M, Miller A, Penny L, Riedy M;

PI WPI; 2000-195321/17.

DR P-PSDB; AAT78935.

XX Novel human UDP-glucuronosyltransferase sequence, polymorphisms for
PT genotyping individuals to predict rate of metabolism of substrates and
PT for identifying potential drug interactions

PT Disclosure; Page 56-59; 72pp; English.

XX This sequence represents the human UDP-glucuronosyltransferase 2B15
CC (UGT2B15) gene. UDP-glucuronosyltransferase (UGTs) are a family of
CC enzymes that catalyze the glucuronic acid conjugation of a wide range of
CC endogenous and exogenous substrates. The UGT2B gene subfamily encode
CC steroid metabolizing isoforms in the liver. Alteration of the expression
CC or function of UGTs may effect drug metabolism. The invention relates to
CC non-chromosomal nucleic acid molecules, which comprise human UGT2B

CC sequence polymorphisms (see AA95051-295110). Probes which detect the
CC UGT2B locus polymorphisms can be used to detect altered UGT2B metabolism
CC of a substrate in an individual. The nucleic acid molecules comprising a
CC human UGT2B sequence polymorphism can be used in screening assays for
CC genotyping individuals, also to predict their rate of metabolism of
CC UGT2B substrate, potential drug-drug interactions and adverse side
CC effects. The polymorphisms can be used as single nucleotide polymorphisms
CC (SNPs) for detecting genetic linkage related to phenotypic variation in
CC activity or expression of UGT2B protein. The polymorphism containing
CC nucleic acid molecules may also be used for generating genetically
CC modified non-human animals and for obtaining site specific gene
CC modification in cell lines.

SO Sequence 1976 BP; 594 A; 368 C; 419 G; 595 T; 0 other;

Query Match 1.3%; Score 35; DB 21; Length 1976;
Best Local Similarity 100.0%; Pred. No. 0.0007;
Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1424 gagttgtcatgcgcacaaaggagccaagcact 1458
|||||
DB 1406 gagttgtcatgcgcacaaaggagccaagcact 1440

RESULT 6
AAV15900
ID AAV15900 standard; cDNA; 2107 BP.

AC AAV15900;

DT 26-MAY-1998 (first entry)
XX

DE Uridine diphospho-glucuronosyltransferase 2B17 (UGT2B17) encoding cDNA.

XX uridine diphospho-glucuronosyltransferase 2B17; UGT2B17; catalyze;
KW androstereone; androstereone-glucuronic acid; androgen; enzyme; ss.

OS Homo sapiens.

PN WO9744466-A1.

XX 27-NOV-1997.

PD 16-MAY-1997; 97WO-CA00328.

XX 17-MAY-1996; 96US-0649319.

PR (ENDO-) ENDORECHERCHE INC.

PA Beaulieu M, Belanger A, Hum DW, Levesque E;

PI WPI; 1998-018520/02.

DR P-PSDB; AAM47126.

XX DNA encoding uridine di:phospho:glucuronosyl:transferase 2B17 -

PT which catalyses conversion of androstereone to

PT androstereone-glucuronic acid

PT Claim 15; Pages 4-6; 53pp; English.

XX This cDNA encodes an enzyme uridine di-phosphoglucuronosyltransferase

XX 2B17 (UGT2B17). This novel enzyme catalyses the conversion of

XX androstereone to androstereone-glucuronic acid. The UGT2B17 can be used to

CC

CC detect anti-UGT2B17 antibodies. The antibody can be used to detect a
 CC localised concentration of UGT2B17 or an alteration in androgen activity.
 CC The UGT2B17 can also be used to alter the concentration of an androgenic
 CC compound in a tissue, specifically dihydrotestosterone. An isolated
 CC nucleotide sequence comprising at least 30 consecutive nucleotides from
 CC the coding region of the 2107 base pair sequence, or its complement can
 CC be used to block the synthesis of UGT2B17, e.g. an expression disrupting
 CC sense or antisense fragment, or as a probe for a UGT2B17 coding sequence.
 XX
 SQ Sequence 2107 BP; 657 A; 382 C; 424 G; 644 T; 0 other;

Query Match 1.2%; Score 32; DB 19; Length 2107;
 Best Local Similarity 100.0%; Pred. No. 0.0084;
 Matches 32; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1115 ctctctgtgcatcccaaaccaagctttat 1146
 ||||||||||||||||||||||||||||
 DB 1138 ctctctgtcatcccaaaccaagctttat 1169

RESULT 7

AA295199
 ID AA295199 standard; DNA: 2092 BP.
 XX
 AC AA295199;
 XX
 DT 05-JUN-2000 (first entry)
 XX
 DE Human UDP-glucuronosyltransferase 2B4 nucleotide sequence.
 XX
 KW UDP-glucuronosyltransferase 2B4; UGT2B4; polymorphism; metabolism; SNPs;
 KW drug interaction; detect; human; single nucleotide polymorphism; ds.
 XX
 OS Homo sapiens.
 XX
 PN WO200006776-A1.
 XX
 PD 10-FEB-2000.
 XX
 PF 22-JUL-1999; 99WO-US16675.
 XX
 PR 28-JUL-1998; 98US-0094391.
 XX
 PA (AXYS-) AXYS PHARM INC.
 XX
 PI Galvin M, Miller A, Penny L, Riedy M;
 DR WPI; 2000-195321/17.
 DR P-SDB; AAY78933.
 XX
 PT Novel human UDP-glucuronosyltransferase sequence, polymorphisms for
 PT genotyping individuals to predict rate of metabolism of substrates and
 PT for identifying potential drug interactions
 XX
 PS Disclosure; Page 34-36; 72pp; English.
 XX
 CC This sequence represents the human UDP-glucuronosyltransferase 2B4
 CC (UGT2B4) gene. UDP-glucuronosyltransferase (UGTs) are a family of
 CC enzymes that catalyse the glucuronic acid conjugation of a wide range of
 CC endogenous and exogenous substrates. The UGT2B gene subfamily encode
 CC steroid metabolizing isoforms in the liver. Alteration of the expression
 CC or function of UGTs may effect drug metabolism. The invention relates to
 CC non-chromosomal nucleic acid molecules, which comprise human UGT2B
 CC sequence polymorphisms (see AA295051-295110). Probes which detect the
 CC UGT2B locus polymorphisms can be used to detect altered UGT2B metabolism
 CC of a substrate in an individual. The nucleic acid molecules comprising a
 CC human UGT2B sequence polymorphism can be used in screening assays for
 CC genotyping individuals, also to predict their rate of metabolism of
 CC UGT2B substrate, potential drug-drug interactions and adverse side
 CC effects. The polymorphisms can be used as single nucleotide polymorphisms
 CC (SNPs) for detecting genetic linkage related to phenotypic variation in
 CC activity or expression of UGT2B protein. The polymorphism containing

CC nucleic acid molecules may also be used for generating genetically
 CC modified non-human animals and for obtaining site specific gene
 CC modification in cell lines.
 XX

SQ Sequence 2092 BP; 639 A; 398 C; 438 G; 617 T; 0 other;

Query Match 1.1%; Score 29; DB 21; Length 2092;
 Best Local Similarity 100.0%; Pred. No. 0.1;
 Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1097 tggataccaccagaatgatctcttgatca 1125
 ||||||||||||||||||||||||
 DB 1103 tggataccaccagaatgatctcttgatca 1131

RESULT 8

AA295209
 ID AA295209 standard; DNA: 480 BP.
 XX
 AC AA295209;
 XX
 DT 05-JUN-2000 (first entry)
 XX
 DE Human UGT2B15 exon 3 nucleotide sequence.
 XX
 KW UDP-glucuronosyltransferase 2B15; UGT2B15; polymorphism; metabolism;
 KW drug interaction; detect; human; single nucleotide polymorphism;
 KW SNPs; ds.
 XX
 OS Homo sapiens.
 XX
 PN WO200006776-A1.
 XX
 PD 10-FEB-2000.
 XX
 PF 22-JUL-1999; 99WO-US16675.
 XX
 PR 28-JUL-1998; 98US-0094391.
 XX
 PA (AXYS-) AXYS PHARM INC.
 XX
 PI Galvin M, Miller A, Penny L, Riedy M;
 DR WPI; 2000-195321/17.
 XX
 PT Novel human UDP-glucuronosyltransferase sequence, polymorphisms for
 PT genotyping individuals to predict rate of metabolism of substrates and
 PT for identifying potential drug interactions
 XX
 PS Example 3; Page 61; 72pp; English.
 XX
 CC This sequence represents the nucleotide sequence of exon 3 of the human
 CC UDP-glucuronosyltransferase 2B15 (UGT2B15) gene.
 CC UDP-glucuronosyltransferase (UGTs) are a family of enzymes that catalyse
 CC the glucuronic acid conjugation of a wide range of endogenous and
 CC exogenous substrates. The UGT2B gene subfamily encode steroid
 CC metabolizing isoforms in the liver. Alteration of the expression or
 CC function of UGTs may effect drug metabolism. The invention relates to
 CC non-chromosomal nucleic acid molecules, which comprise human UGT2B
 CC sequence polymorphisms. Probes which detect the UGT2B locus polymorphisms
 CC can be used to detect altered UGT2B metabolism of a substrate in an
 CC individual. The nucleic acid molecules comprising a human UGT2B sequence
 CC polymorphism can be used in screening assays for genotyping individuals,
 CC also to predict their rate of metabolism of UGT2B substrate, potential
 CC drug-drug interactions and adverse side effects. The polymorphisms can be
 CC used as single nucleotide polymorphisms (SNPs) for detecting genetic
 CC linkage related to phenotypic variation in activity or expression of
 CC UGT2B protein. The polymorphism containing nucleic acid molecules may
 CC also be used for generating genetically modified non-human animals and
 CC for obtaining site specific gene modification in cell lines.
 XX
 SQ Sequence 480 BP; 154 A; 75 C; 101 G; 150 T; 0 other;

Query Match 1.0%; Score 28; DB 21; Length 480;
 Best Local Similarity 100.0%; Pred. No. 0.3;
 Matches 28; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 936 atggtattgtgtgtttctctctgtgggtc 963
 |||||||
 Db 77 atgtattgtgtgtttctctctgtgggtc 104

RESULT 9
 AAV32421
 ID AAV32421 standard; cDNA; 1362 BP.
 AC AAV32421;
 DT 13-OCT-1998 (first entry)
 DE Homo sapiens clone CC182_1 coding region.
 XX Homo sapiens; clone; CC182_1; ds.
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT CDS 405..662
 FT /*tag= a
 FT /product= CC182_1 protein
 XX
 PN WO9822501-A2.
 XX
 PD 28-MAY-1998.
 XX
 PF 19-NOV-1997; 97WO-US21123.
 XX
 PR 17-NOV-1997; 97US-0971786.
 PR 20-NOV-1996; 96US-0752912.
 PR 14-FEB-1997; 97US-0800826.
 XX
 PA (GENM) GENETICS INST INC.
 XX
 PI Agostino MJ, Jacobs K, Lavallie ER, Mccoy JM, Merberg D;
 PI Racine JA, Spaulding V, Treacy M;
 XX
 DR WPI: 1998-312414/27.
 DR P-PSDB: AAM48807.
 XX
 PT New nucleic acid encoding secreted protein from human cells -
 PT potentially useful, e.g. as immuno-modulators, antitumour agents,
 PT promoters of tissue growth, haemostatic and thrombolytic agents
 XX
 PS Claim 28; Page 70; 93pp; English.

The sequence is that of the coding region of clone CC182_1. It encodes a secreted protein and may be used to express the protein recombinantly, as a tissue/molecular weight markers; for chromosome identification, to identify possible genetic disorders, to isolate new related DNA, as a source of primers for PCR, to generate anti-protein or anti-DNA antibodies and in interaction trap assays to identify sequences that encode interacting proteins. The protein can be used to screen compounds for biological activity, to raise antibodies, as tissue markers, for isolation of related receptors and ligands and as nutritional sources. Such proteins may also have many biological activities, e.g. cytokine and cell proliferation/differentiation activity; immunosuppressant or immunostimulant activity (e.g. for treating immune deficiency, including infection with human immune deficiency virus, regulation of lymphocyte growth, treating cancer and many autoimmune diseases, to prevent transplant rejection or induce tumour immunity), regulation of haematopoiesis, e.g. treatment of myeloid or lymphoid diseases; CC promoting growth of bone, cartilage, tendon, ligament and nerve tissue, e.g. for healing wounds, treatment of burns, ulcers, periodontal disease

CC and neurodegeneration, inhibition or activation of follicle-stimulating CC hormone (modulation of fertility), chemotactic/chemokinetic activity CC (e.g. for mobilising specific cell types to sites of injury, infection), CC haemostatic and thrombolytic activity (e.g. for treating haemophilia or CC stroke), as receptors or ligands; anti-inflammatory activity (for treating CC septic shock, Crohn's disease etc.), as antimicrobials, modulators of CC metabolism and behaviour, as analgesics, enzymes for treating specific CC deficiency disorders and in treatment of psoriasis, in human or CC veterinary medicine. Neutralising antibodies against the protein can CC be used therapeutically, e.g. to detect or prevent metastasis of CC cancers expressing the protein. The protein can be expressed in CC vivo from DNA, introduced in standard gene therapy vectors.

Sequence 1362 BP; 409 A; 210 C; 197 G; 544 T; 2 other;

Query Match 1.0%; Score 28; DB 10; Length 1362;
 Best Local Similarity 100.0%; Pred. No. 0.25;
 Matches 28; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2527 ctgaaagtaaaaaaaaaaaaaaaaaa 2554
 |||||||
 Db 1322 ctgaaagtaaaaaaaaaaaaaaaaaa 1349

RESULT 10
 AAF33114
 ID AAF33114 standard; cDNA; 930 BP.
 AC AAF33114;
 DT 23-MAR-2001 (first entry)
 DE Human secreted protein gene 20 SEQ ID NO:30.
 XX
 PF Human; secreted protein; immunosuppressive; antiarthritic; antirheumatic;
 KW antiproliferative; cytostatic; cardiant; vasotropic; cerebroprotective;
 KW neurotropic; neuroprotective; antibacterial; virucide; fungicide;
 KW ophthalmological; autoimmune disease; hyperproliferative disorder;
 KW cardiovascular disorder; cerebrovascular disorder; infection; chemotaxis;
 KW nervous system disorder; ocular disorder; skin aging; wound healing;
 KW food additive; tissue regeneration; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200077256-A1.
 XX
 PD 21-DEC-2000.
 XX
 PF 01-JUN-2000; 2000WO-US14963.
 XX
 PR 11-JUN-1999; 99US-0138631.
 XX
 PA (HUMA-) HUMAN GENOME SCI INC.
 XX
 PI Rosen CA, Ruben SM, Komatsoulis GA;
 PI WPI: 2001-032315/04.
 DR P-PSDB: AAB64792.
 XX
 PT Isolated nucleic acid molecule encoding a human secreted protein is
 PT used in preventing, treating or ameliorating a medical condition
 XX
 PS Claim 1; Page 439; 506pp; English.

Polynucleotide sequences AAF33095 - AAF33142 encode human secreted proteins AAB64773 - AAB64820. Fragments of the secreted proteins and amino acid sequences which share homology with the fragments are represented in AAB64821 - AAB64880. The genes and proteins have activities dependent on the tissues and cells in which they are expressed. Examples of their activities and the activities of their agonists and antagonists include; immunosuppressive; antiarthritic; antirheumatic; antiproliferative; cytostatic; cardiant; vasotropic;

CC cerebroprotective; neurotropic; antibacterial; antiviral; fungicide; and ophthalmological. The secreted proteins, polynucleotides, CC antagonists and agonists may be useful in treating, preventing and CC diagnosing diseases and disorders such as autoimmune diseases e.g. CC rheumatoid arthritis, hyperproliferative disorders e.g. neoplasms of the CC breast or liver, cardiovascular disorders e.g. cardiac arrest, CC cerebrovascular disorders e.g. cerebral ischemia, angiogenesis, nervous CC system disorders e.g. Alzheimer's disease, infections caused by bacteria, CC viruses and fungi and ocular disorders e.g. corneal infection. The CC polypeptides can also be used to aid wound healing and epithelial cell CC proliferation, to prevent skin aging due to sunburn, to maintain organs CC before transplantation, for supporting cell culture of primary tissues, CC to regenerate tissues and in chemotaxis. The polypeptides can also be CC used as a food additive or preservative to increase or decrease storage CC capabilities. Included in the invention are sequences AAB64772 and CC AAF33095 - AAF33142 which are used in the isolation and characterisation CC of the nucleotide and protein sequences of the invention.

SQ Sequence 930 BP; 280 A; 137 C; 136 G; 376 T; 1 other;

Query Match 1.0%; Score 27; DB 22; Length 930;
Best Local Similarity 100.0%; Pred. No. 0.6;
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2528 tgaagtaaaaaa 2554
|||||
DB 901 tgaagtaaaaaa 927

RESULT 11

AA295196
ID AA295196 standard; DNA; 1138 BP.

AC AA295196;

DT 05-JUN-2000 (first entry)

XX Human UGT2B4 exon 4 nucleotide sequence.

DE UDP-glucuronosyltransferase 2B4; UGT2B4; polymorphism; metabolism; SNPs;
KM drug interaction; detect; human; single nucleotide polymorphism; ds.
XX Homo sapiens.

OS MO200006776-A1.

PN 10-FEB-2000.

PD 22-JUL-1999; 99WO-US16675.

PR 28-JUL-1998; 98US-0094391.

XX (AXYS-) AXYS PHARM INC.

PA Galvin M, Miller A, Penny L, Riedy M;

PI WPI; 2000-195321/17.

DR Novel human UDP-glucuronosyltransferase sequence, polymorphisms for
XX genotyping individuals to predict rate of metabolism of substrates and
XX for identifying potential drug interactions -
XX Example 1; Page 32-33; 72pp; English.

PS This sequence represents the nucleotide sequence of exon 4 of the human
XX UDP-glucuronosyltransferase 2B4 (UGT2B4) gene.
XX UDP-glucuronosyltransferase (UGTs) are a family of enzymes that catalyse
CC the glucuronic acid conjugation of a wide range of endogenous and
CC exogenous substrates. The UGT2B gene subfamily encode steroid
CC metabolizing isoforms in the liver. Alteration of the expression or
CC function of UGTs may effect drug metabolism. The invention relates to
CC non-chromosomal nucleic acid molecules, which comprise human UGT2B

CC sequence polymorphisms. Probes which detect the UGT2B locus polymorphisms
CC can be used to detect altered UGT2B metabolism of a substrate in an
CC individual. The nucleic acid molecules comprising a human UGT2B sequence
CC polymorphism can be used in screening assays for genotyping individuals,
CC also to predict their rate of metabolism of UGT2B substrate, potential
CC drug-drug interactions and adverse side effects. The polymorphisms can be
CC used as single nucleotide polymorphisms (SNPs) for detecting genetic
CC linkage related to phenotypic variation in activity or expression of
CC UGT2B protein. The polymorphism containing nucleic acid molecules may
CC also be used for generating genetically modified non-human animals and
CC for obtaining site specific gene modification in cell lines.

SQ Sequence 1138 BP; 324 A; 220 C; 189 G; 405 T; 0 other;

Query Match 1.0%; Score 27; DB 21; Length 1138;
Best Local Similarity 100.0%; Pred. No. 0.58;
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1097 tggatccccagatgatcttctgt 1123
|||||
DB 458 tggatccccagatgatcttctgt 484

RESULT 12

AA25915
ID AA25915 standard; cDNA; 1316 BP.

AC AA25915;

DT 10-APR-2000 (first entry)

XX Arabidopsis thaliana gibberellin 2-oxidase AtGA2ox1 cDNA.

DE Gibberellin 2-oxidase; AtGA2ox1; 2-beta-hydroxylation; inactivation;
KM growth inhibition; ss.
XX Arabidopsis thaliana.

OS Arabidopsis thaliana.

FN Key Location/Qualifiers

FT CDS /tag= a

FT /product= "Gibberellin 2-oxidase AtGA2ox1"

PN MO9966029-A2.

PD 23-DEC-1999.

PD 11-JUN-1999; 99WO-GB01857.

PR 12-JUN-1998; 98GB-0012821.

PR 15-JUL-1998; 98GB-0015404.

XX (UYBR-) UNIV BRISTOL.

PA Thomas SG, Hedden P, Phillips AL;

PI WPI; 2000-097742/08.

DR P-PSDB; AAY58598.

XX New isolated plant gibberellin 2-oxidase enzymes and nucleic acids,
XX used to produce transgenic plants with improved or altered growth
XX characteristics -
XX Example 3; Fig 5; 42pp; English.

PS This sequence represents cDNA encoding an Arabidopsis thaliana
XX gibberellin (GA) 2-oxidase, PGGA2ox1. This enzyme is a GA 2-beta-
XX hydroxylase that acts on C19-GAs and for which 2-beta-hydroxylation is
CC its only activity. Hydroxylation at the 2-beta position of a GA results
CC in a biologically inactive product, and is the most important route for
CC GA metabolism in plants, ensuring that the active hormones do not
CC accumulate in plant tissues. The nucleic acids can be used to transform

CC plants so that gibberellin 2-oxidase can be constitutively over-expressed
 CC or otherwise enhanced to reduce the concentration of bioactive GAs in the
 CC plants and therefore to inhibit plant growth. Growth inhibition is useful
 CC in many agricultural and horticultural applications such as enhancing
 CC lodging-resistance and grain yield in cereals, improving seedling
 CC quality, reducing the growth of amenity grasses, reducing shoot growth in
 CC orchard and ornamental trees, improving tolerance to cold, drought and
 CC infection, and increasing yields (by the diversion of assimilates from
 CC vegetative to reproductive organs). The nucleic acids may also be used to
 CC induce male and/or female sterility (by expression in floral organs),
 CC prevent pre-harvest sprouting, reduce shoot growth in hedging plants,
 CC inhibit reversibility in the development or germination of seeds and
 CC reduce shoot growth in commercial wood species. Antisense constructs of
 CC the nucleic acids can also be used to transform plants to reduce the
 CC expression of GA 2-oxidase (claimed) to promote plant growth, (e.g., to
 CC improve fruit set and growth in seedless grapes, citrus fruits and
 CC pears), improve skin texture and fruit shape in apples, increase stem
 CC length and therefore yield in sugar cane, increase yield and earliness in
 CC celery and rhubarb, improve malting yields and quality in cereals
 CC (particularly barley), and increase growth in woody species.

SO Sequence 1316 BP; 440 A; 249 C; 252 G; 375 T; 0 other;

Query Match 1.0%; Score 27; DB 21; Length 1316;
 Best Local Similarity 100.0%; Pred. No. 0.57;
 Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2534 taataaaataaaataaaacactgt 2560
 ||||||||||||||||||||||||||||
 Db 1190 taataaaataaaataaaacactgt 1216

RESULT 13

AAAF3111
 ID AAF3111 standard; cDNA; 1380 BP.

AC AAF3111;

DT 23-MAR-2001 (first entry)

DE Human secreted protein gene 17 SEQ ID NO:27.

XX Human; secreted protein; immunosuppressive; antiarthritic; antirheumatic;
 KW antiproliferative; cytostatic; cardiant; vasotropic; cerebroprotective;
 KW neurotrophic; neuroprotective; antibacterial; virucide; fungicide;
 KW ophthalmological; autoimmune disease; hyperproliferative disorder;
 KW cardiovascular disorder; cerebrovascular disorder; infection; chemotaxis;
 KW nervous system disorder; ocular disorder; skin aging; wound healing;
 KW food additive; tissue regeneration; ss.

OS Homo sapiens.

PN WO200077256-A1.

PD 21-DEC-2000.

PF 01-JUN-2000; 2000WO-US14963.

PR 11-JUN-1999; 99US-0138631.

PA (HUMA-) HUMAN GENOME SCI INC.

PI Rosen CA, Ruben SM, Komatsoulis GA;

DR WPI: 2001-032315/04.

DR P-PSDB: AAB64789.

PT Isolated nucleic acid molecule encoding a human secreted protein is

PS used in preventing, treating or ameliorating a medical condition

XX Claim 1; Page 437-438; 506pp; English.

CC Polynucleotide sequences AAF33095 - AAF33142 encode human secreted
 CC proteins AAB64773 - AAB64820. Fragments of the secreted proteins and
 CC amino acid sequences which share homology with the fragments are
 CC represented in AAB64821 - AAB64880. The genes and proteins have
 CC activities dependent on their activities and the activities of their
 CC agonists and antagonists include; immunosuppressive; antirheumatic;
 CC antineumatic; antiproliferative; cytostatic; cardiant; vasotropic;
 CC cerebroprotective; neurotrophic; neuroprotective; antibacterial; virucide;
 CC fungicide; and ophthalmological. The secreted proteins, polynucleotides,
 CC antagonists and agonists may be useful in treating, preventing and
 CC diagnosing diseases and disorders such as autoimmune diseases e.g.,
 CC rheumatoid arthritis, hyperproliferative disorders e.g., neoplasms of the
 CC breast or liver, cardiovascular disorders e.g., cardiac arrest,
 CC cerebrovascular disorders e.g., cerebral ischemia, angiodenesis, nervous
 CC system disorders e.g., Alzheimer's disease, infections caused by bacteria,
 CC viruses and fungi and ocular disorders e.g., corneal infection. The
 CC polypeptides can also be used to aid wound healing and epithelial cell
 CC proliferation, to prevent skin aging due to sunburn, to maintain organs
 CC before transplantation, for supporting cell culture of primary tissues,
 CC to regenerate tissues and in chemotaxis. The polypeptides can also be
 CC used as a food additive or preservative to increase or decrease storage
 CC capabilities. Included in the invention are sequences AAB64772 and
 CC AAF33095 - AAF33142 which are used in the isolation and characterisation
 CC of the nucleotide and protein sequences of the invention.

SO Sequence 1380 BP; 351 A; 301 C; 270 G; 458 T; 0 other;

Query Match 1.0%; Score 27; DB 22; Length 1380;
 Best Local Similarity 100.0%; Pred. No. 0.56;
 Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2528 tgaagtaaaataaaataaaataaa 2554
 ||||||||||||||||||||||||||||

Db 1334 tgaagtaaaataaaataaaataaa 1360

RESULT 14

AAAF63820
 ID AAF63820 standard; cDNA; 1721 BP.

AC AAF63820;

DT 03-APR-2001 (first entry)

DE Human secreted protein gene 32 SEQ ID NO:42.

XX Human; immunosuppressive; antiarthritic; antirheumatic; neurotrophic;
 KW antiproliferative; cytostatic; cardiant; vasotropic; cerebroprotective;
 KW neuroprotective; antibacterial; virucide; fungicide; ophthalmological;
 KW vulnary; autoimmune disease; hyperproliferative disorder; cancer;
 KW cardiovascular disorder; cerebrovascular disorder; infection;
 KW nervous system disorder; ocular disorder; chemotaxis; food additive;
 KW secreted protein; ss.

OS Homo sapiens.

PN WO200077021-A1.

PD 21-DEC-2000.

PF 01-JUN-2000; 2000WO-US15135.

PR 11-JUN-1999; 99US-0138632.

PA (HUMA-) HUMAN GENOME SCI INC.

PI (ROSE/) ROSEN C A.

DR Rosen CA, Ruben SM, Komatsoulis GA;

DR WPI: 2001-071257/08.

DR P-PSDB: AAB75271.

xx Nucleic acid molecules encoding human secreted proteins, used in
 pt preventing, treating or ameliorating a disorder, e.g. Alzheimer's and
 pt Parkinson's diseases and cancers -
 xx
 ps Claim 1; Page 457; 530pp; English.
 xv

This invention relates to polynucleotide sequences AAF63789 - AAF63836 which encode human secreted proteins AAB75260 - AAB75287. Included in the invention are protein sequences AAB75288 - AAB75341 which are fragments of the secreted proteins and amino acid sequences with which these fragments share homology. Examples of the activities of the proteins and polynucleotides and the activities of their agonists and antagonists include, immunosuppressive; antiarthritis; antineumatic; antiproliferative; cytostatic; cardiact; vasotropic; cerebroprotective; neuroprotective; antibacterial; virocid; fungicide; ophthalmological; and vulnerary activity. The protein and polynucleotide sequences, their agonists and antagonists may be useful for treating, preventing and diagnosing diseases and disorders such as autoimmune diseases e.g. rheumatoid arthritis, hyperproliferative disorders e.g. neoplasms of the breast or liver, cardiovascular disorders e.g. cardiac arrest, cerebrovascular disorders e.g. cerebral ischaemia, angiogenesis, nervous system disorders e.g. Alzheimer's disease, infections caused by bacteria, viruses and fungi and ocular disorders e.g. corneal infection. The polypeptides can also be used to aid wound healing and epithelial cell proliferation, to prevent skin aging due to sunburn, to maintain organs before transplantation, for supporting cell culture of primary tissues, to regenerate tissues and in chemotaxis. The polypeptides can also be used as a food additive or preservative to increase or decrease storage capabilities. Included in the invention are oligonucleotides AAF63780 - AAF63788 and peptide AAB75239 which are used in the identification and characterisation of the DNA and protein sequences of the invention.

SQ Sequence 1721 BP; 558 A; 294 C; 350 G; 519 T; 0 other;

Query Match	1.0%;	Score 27;	DB 22;	Length 1721;
Best Local Similarity	100.0%;	Pred. No. 0.54;		
Matches 27;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0

Oy	2528	tgaagtaaaaaaaaaaaaaaa	2554
Db	1669	tgaagtataaaaaaaaaaaaaaa	1695

RESULT 15

ID	Accession	Gene	Length (bp)	Source
1	AAC67268	standard; cDNA	3426	BP.

AC AAC67268;

DT 09-APR-2001 (first entry)

DE	Human	NEAR-1	coding	SEQ	ID	NO:	1.

KW Human, nuclear factor associated with dsRNA; NFAR-1; NFAR-2;
KW transcription regulator; chromosome 19p13.1-13.2; apoptosis;
KW tumorigenesis; ss.

OS Homo sapiens.

PN WO200077205-A1

PD 21-DEC-2000

PF 09-JUN-2000; 2000WO-US15767.

PR 11-JUN-1999; 99US-0138612.

PA (BARB/) BARBER G N.
PA (SAUN/) SAUNDERS L.
PA (PERK/) PERKINS D J.

XX Barber GN, Saunders L, Perkins DJ
PI
XX
DR WPI; 2001-080688/09.
DR P-PSDB; AAB35147.

PT Novel isolated human nuclear factor associated with dsRNA polypeptide
PT useful for determining structure-function relationships and as affinity
PT tag to identify and isolate interacting proteins that bind to the
PT factor -

CC The present invention provides the protein and coding sequences of two
CC human nuclear factors associated with dsRNA (NPAR-1 and NPAR-2). These
CC are transcriptional regulators and are thought to play a role in
CC apoptosis and tumorigenesis. The coding sequence (found on chromosome
CC 1p13.1-13.2) is useful as a probe to detect rearrangements in tumour
CC cells and the protein is useful for determining structure-function
CC relationships.

SQ Sequence 3426 BP; 886 A; 814 C; 913 G; 813 T; 0 other;

Query Match	1.0%;	Score 27;	DB 22;	Length 3426;
Best Local Similarity	100.0%;	Pred. NO. 0.48;		
Matches 27;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;

Qy	2528	tgaagaagtaaaaaaaaaaaaaaa	2554
Db	3398	tgaagaagtaaaaaaaaaaaaaaa	3424

Search completed: August 27, 2001, 15:28:42
Job time: 6115 sec

